

10/694,111

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1201txs

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	FEB 25	CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered
NEWS	4	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	5	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	6	FEB 28	MEDLINE/LMEDLINE reloaded
NEWS	7	MAR 02	GBFULL: New full-text patent database on STN
NEWS	8	MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	9	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	10	MAR 22	KOREAPAT now updated monthly; patent information enhanced
NEWS	11	MAR 22	Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS	12	MAR 22	PATDPASPC - New patent database available
NEWS	13	MAR 22	REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS	14	APR 04	EPFULL enhanced with additional patent information and new fields
NEWS	15	APR 04	EMBASE - Database reloaded and enhanced
NEWS	16	APR 18	New CAS Information Use Policies available online
NEWS	17	APR 25	Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAPLUS and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.
NEWS	18	APR 28	Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAPLUS
NEWS	19	MAY 23	GBFULL enhanced with patent drawing images
NEWS	20	MAY 23	REGISTRY has been enhanced with source information from CHEMCATS
NEWS	21	MAY 26	STN User Update to be held June 6 and June 7 at the SLA 2005 Annual Conference
NEWS	22	JUN 06	STN Patent Forums to be held in June 2005
NEWS	23	JUN 06	The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available
NEWS EXPRESS			JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

10/694,111

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 18:22:51 ON 07 JUN 2005

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 18:23:02 ON 07 JUN 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 JUN 2005 HIGHEST RN 851745-60-3

DICTIONARY FILE UPDATES: 6 JUN 2005 HIGHEST RN 851745-60-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

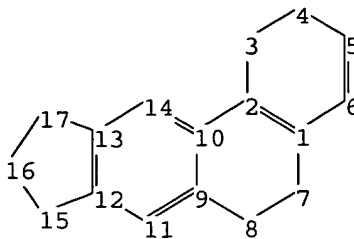
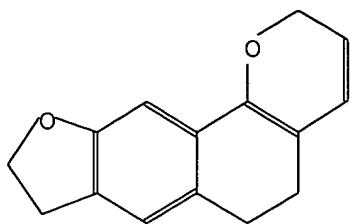
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10694111.str

10/694,111



ring nodes :  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17  
ring bonds :  
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10 9-11 10-14 11-12 12-13  
12-15 13-14 13-17 15-16 16-17  
exact/norm bonds :  
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 12-15 13-17 15-16 16-17  
normalized bonds :  
9-10 9-11 10-14 11-12 12-13 13-14

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom

L1 STRUCTURE UPLOADED

=> s l1  
SAMPLE SEARCH INITIATED 18:23:18 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 9692 TO ITERATE

10.3% PROCESSED 1000 ITERATIONS 0 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 187940 TO 199740  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 ful  
FULL SEARCH INITIATED 18:23:23 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 192542 TO ITERATE

100.0% PROCESSED 192542 ITERATIONS 10 ANSWERS  
SEARCH TIME: 00.00.02

L3 10 SEA SSS FUL L1

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	161.33	161.54

10/694,111

FILE 'CAPLUS' ENTERED AT 18:23:31 ON 07 JUN 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 7 Jun 2005 VOL 142 ISS 24  
FILE LAST UPDATED: 6 Jun 2005 (20050606/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3  
L4 3 L3

=> file reg	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	1.35	162.89

FILE 'REGISTRY' ENTERED AT 18:25:10 ON 07 JUN 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 JUN 2005 HIGHEST RN 851745-60-3  
DICTIONARY FILE UPDATES: 6 JUN 2005 HIGHEST RN 851745-60-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

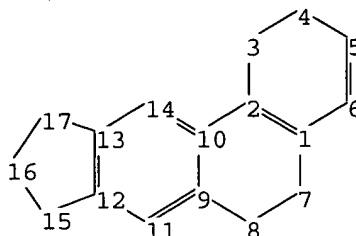
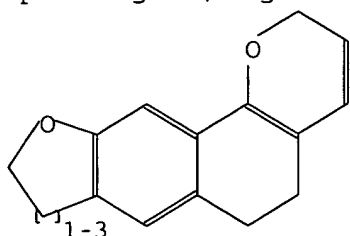
10/694,111

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\106941111.str



ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

ring bonds :

1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10 9-11 10-14 11-12 12-13  
12-15 13-14 13-17 15-16 16-17

exact/norm bonds :

1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 12-15 13-17 15-16 16-17

normalized bonds :

9-10 9-11 10-14 11-12 12-13 13-14

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom

L5 STRUCTURE UPLOADED

=> s 15

SAMPLE SEARCH INITIATED 18:25:29 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 9551 TO ITERATE

10.5% PROCESSED 1000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 185163 TO 196877  
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> s 15 ful

FULL SEARCH INITIATED 18:25:36 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 189760 TO ITERATE

10/694,111

100.0% PROCESSED 189760 ITERATIONS  
SEARCH TIME: 00.00.01

11 ANSWERS

L7 11 SEA SSS FUL L5

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

161.33

324.22

FILE 'CAPLUS' ENTERED AT 18:25:45 ON 07 JUN 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 7 Jun 2005 VOL 142 ISS 24

FILE LAST UPDATED: 6 Jun 2005 (20050606/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 17

L8 3 L7

=> d l8 ibib hitstr abs 1-3

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:962909 CAPLUS

DOCUMENT NUMBER: 141:412445

TITLE: Photochromic 2-arylamine group-substituted benzo-, naphtho-, and phenanthrochromenes, their preparation and compositions containing them

INVENTOR(S): Breyne, Olivier; Bremand, Rodrigue; Chan, You Ping

PATENT ASSIGNEE(S): Corning Incorporated, USA

SOURCE: Fr. Demande, 34 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2854631	A1	20041112	FR 2003-5437	20030505
WO 2004099172	A1	20041118	WO 2004-US14240	20040505
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				

10/694,111

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
SN, TD, TG

PRIORITY APPLN. INFO.:

FR 2003-5437

A 20030505

OTHER SOURCE(S):

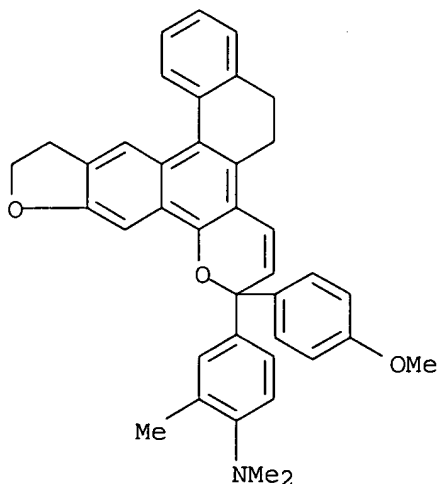
MARPAT 141:412445

IT 792214-94-9P 792215-03-3P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP  
(Properties); SPN (Synthetic preparation); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)  
(production of photochromic benzo-, naphtho-, and phenanthrochromenes)

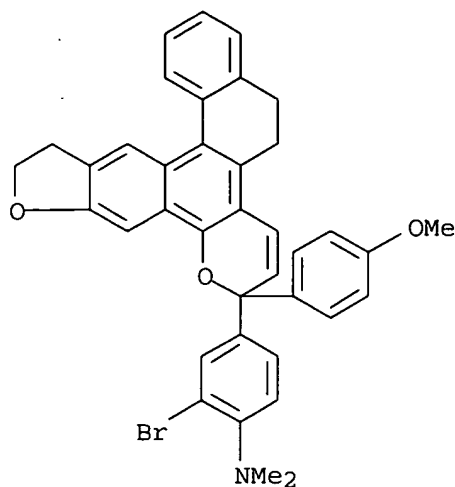
RN 792214-94-9 CAPLUS

CN Benzenamine, N,N,2-trimethyl-4-[6,9,13,14-tetrahydro-9-(4-methoxyphenyl)-  
5H-benzofuro[5,6-h]naphtho[2,1-f][1]benzopyran-9-yl]- (9CI) (CA INDEX  
NAME)



RN 792215-03-3 CAPLUS

CN Benzenamine, 2-bromo-N,N-dimethyl-4-[6,9,13,14-tetrahydro-9-(4-  
methoxyphenyl)-5H-benzofuro[5,6-h]naphtho[2,1-f][1]benzopyran-9-yl]- (9CI)  
(CA INDEX NAME)



GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. [I; R1 = NR'R''; R', R'' = independently (un)substituted alkyl, Ph, or NR'R'' = (un)substituted 5-7-membered heterocycle; R2, R3 = H, halo, especially F, Cl, Br; cyclo/alkyl, alkoxy, (un)substituted Ph, Bn; R4 =

H, cyclo/alkyl, alkoxy, Ph, Bn; X = (un)substituted Ph, naphthyl, phenanthryl, optionally annelated] were prepared by cyclocondensation of a 1-naphthol-based precursor with a propargylic alc. II or an unsatd. aldehyde III. I can be incorporated in polymer matrixes for manufacture of ophthalmic eyeglasses, sunglasses, optical devices, etc.. I have photochromic properties which are durable under conditions encountered in ophthalmic use. For instance, naphthol IV was cyclocondensed with II (R1 = NMe2, R2 = Ph, R3 = R4 = H) in toluene to give V ( $\lambda_{\max}$  = 452 nm).

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:905684 CAPLUS

DOCUMENT NUMBER: 141:366215

TITLE: Preparation of oxygen-containing heterocyclic fused naphthopyrans

INVENTOR(S): Qin, Xuzhi

PATENT ASSIGNEE(S): Vision-Ease Lens, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004215024	A1	20041028	US 2003-694111	20031027



WO 2004047674 A2 20040610 WO 2003-US34062 20031027  
 WO 2004047674 A3 20041021

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
 PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2002-422147P P 20021028

OTHER SOURCE(S): MARPAT 141:366215

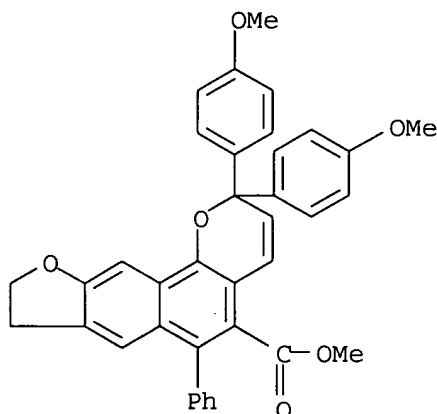
IT 780808-05-1P 780808-07-3P 780808-09-5P

780808-11-9P

RL: DEV (Device component use); SPN (Synthetic preparation); TEM  
 (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (preparation of oxygen-containing heterocyclic fused naphthopyrans as  
 photochromic substances for photochromic lense)

RN 780808-05-1 CAPLUS

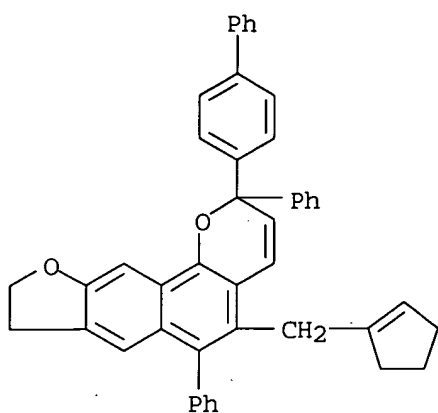
CN 2H-Benzofuro[5,6-h]-1-benzopyran-5-carboxylic acid, 8,9-dihydro-2,2-bis(4-methoxyphenyl)-6-phenyl-, methyl ester (9CI) (CA INDEX NAME)



RN 780808-07-3 CAPLUS

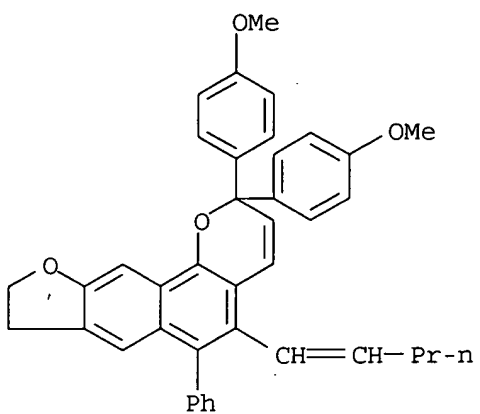
CN 2H-Benzofuro[5,6-h]-1-benzopyran, 2-[1,1'-biphenyl]-4-yl-5-(1-cyclopenten-1-ylmethyl)-8,9-dihydro-2,6-diphenyl- (9CI) (CA INDEX NAME)

10/694,111



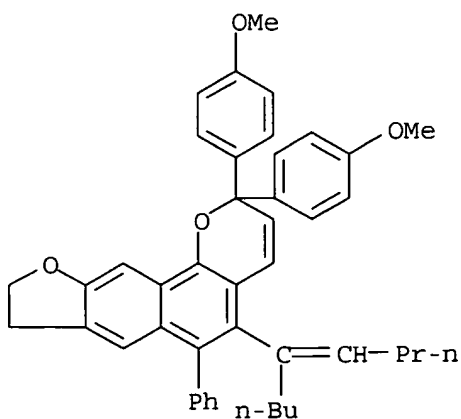
RN 780808-09-5 CAPLUS

CN 2H-Benzofuro[5,6-h]-1-benzopyran, 8,9-dihydro-2,2-bis(4-methoxyphenyl)-5-(1-pentenyl)-6-phenyl- (9CI) (CA INDEX NAME)

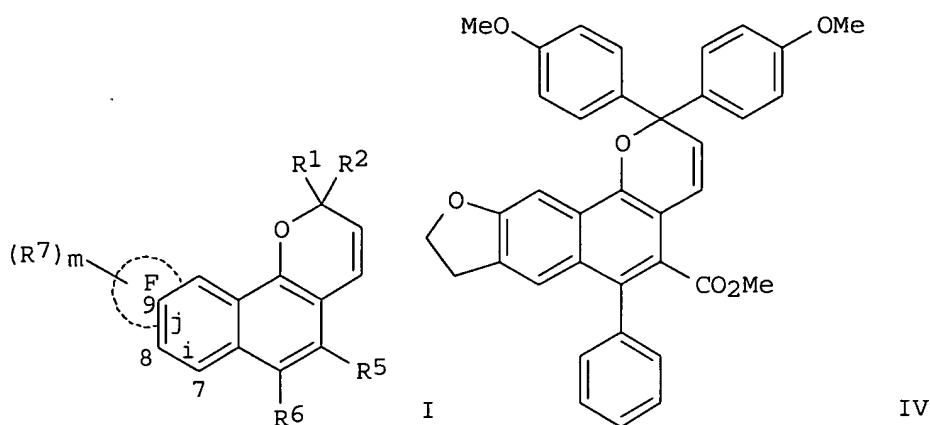


RN 780808-11-9 CAPLUS

CN 2H-Benzofuro[5,6-h]-1-benzopyran, 5-(1-butyl-1-pentenyl)-8,9-dihydro-2,2-bis(4-methoxyphenyl)-6-phenyl- (9CI) (CA INDEX NAME)



GI



AB This invention relates to novel naphthopyrans (I) [I] having an oxygen-containing heterocyclic group F annelated on the i, j, or k side of the naphthopyran ring, having certain substituents at the 2, 5, and 6 positions of the naphthopyran ring [wherein ring F = 5- to 7-member saturated heterocyclic ring group fused to i or j side of the naphthopyran ring and containing an oxygen atom directly connected to 7-, 8-, or 9-position; R6 = H, C1-6 alkyl or alkoxy, C(O)R (wherein R = H, HO, alkyl, alkoxy, aryl, or (un)substituted heteroaryl); R5 = HO, halogen (notably fluorine, chlorine or bromine), linear or branched C1-12 alkyl, C3-12 cycloalkyl, linear or branched C1-12 alkoxy, each (un)substituted haloalkyl, halocycloalkyl, or haloalkoxy, linear or branched C1-12 alkenyl or alkynyl, linear or branched C1-12 alkenyloxy or alkynyloxy, aryl, heteroaryl, aralkyl, heteroaralkyl, each (un)substituted NH<sub>2</sub> or CONH<sub>2</sub>; R1, R2 = H, linear or branched C1-12 alkyl, C3-12 cycloalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl; or R1 and R2 together form (un)substituted ring group such as adamantyl, norbornyl, fluorenylidene, 5,5- or 10,10-di(C1-6)alkylanthracenyliidene, 5 (or 10)-(C1-6)alkyl-5 (or 10)-OH (or OR<sub>15</sub>)anthracenyliidene or spiro[C5 or 6]cycloalkylanthracenyliidene ring group; m = 0-6]. These naphthopyrans have interesting photochromic properties. Also related to this invention are (1) a photochromic composition containing naphthopyran compound I and linear or cross-linked (CO)polymers and (2) an ophthalmic lense that incorporates the naphthopyran compound I. Thus, benzoylation of 2,3-dihydrobenzofuran by benzoyl chloride in the presence of AlCl<sub>3</sub> in CH<sub>2</sub>Cl<sub>2</sub> gave 5-benzoyl-2,3-dihydrobenzofuran which was condensed with di-Me succinate in the presence of potassium tert-butoxide in toluene under reflux to give 2-[(2,3-dihydrobenzofuran-5-yl)phenylmethylene]succinic acid monomethyl ester (II). Cyclization of II by treatment with Ac<sub>2</sub>O in the presence of AcOK under refluxing for 1.5 h gave Me 8-acetoxy-2,3-dihydro-5-phenylnaphtho[2,3-b]furan-6-carboxylate which was treated with p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H in toluene under refluxing for 2 h to give Me 8-hydroxy-2,3-dihydro-5-phenylnaphtho[2,3-b]furan-6-carboxylate (III). Cycloaddn. reaction of III with 1,1-bis(4-methoxyphenyl)-2-propyn-1-ol in the presence of p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H under refluxing for 3 h gave furonaphthopyran compound (IV). A polyurethane film (0.1 mm thickness) containing IV had two absorption peaks in the visible spectrum with a relative

induced optical d. of 0.91 when measured before and after exposure of the polyurethane film to a 365 nm UV source.

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:417752 CAPLUS

DOCUMENT NUMBER: 139:8129

TITLE: Photochromic naphthopyran compounds and compositions and articles containing them

INVENTOR(S): Qin, Xuzhi

PATENT ASSIGNEE(S): Vision-Ease Lens, Inc., USA

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003044022	A2	20030530	WO 2002-US37469	20021120
WO 2003044022	A3	20040122		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
US 2003146419	A1	20030807	US 2001-38350	20011120
EP 1446406	A2	20040818	EP 2002-792287	20021120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
PRIORITY APPLN. INFO.:			US 2001-38350	A 20011120
			WO 2002-US37469	W 20021120

OTHER SOURCE(S): MARPAT 139:8129

IT 532428-11-8P 532428-12-9P 532428-14-1P

532428-16-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(dye; production of photochromic naphthopyran dyes)

RN 532428-11-8 CAPLUS

CN Benzofuro[5,6-h]indeno[2,1-f][1]benzopyran-9-ol, 1,2,6,9-tetrahydro-6-(4-methoxyphenyl)-6,9-diphenyl- (9CI) (CA INDEX NAME)





10/694,111

AB Photochromic naphthopyrans (I; R1, R2 = atoms or groups providing photochromic properties; ring A = 5-, 6-, or 7-membered heterocyclic ring having only one O, S, or N heteroatom) displaying good color distribution are disclosed. In an example, 3-(4-methoxyphenyl)-3,13-diphenyl-13-hydroxy-3H-(4,5-dihydrofurano[2,3-b]indeno[3,2-f]naphtho)[1,2-b]pyran was prepared from 2,3-dihydrobenzofuran, benzoyl chloride, di-Me succinate, 1-(4-methoxyphenyl)-1-phenyl-2-propyn-1-ol, and PhMgBr.

=> log y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION

FULL ESTIMATED COST

15.27	339.49
-------	--------

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION

CA SUBSCRIBER PRICE

-2.19	-2.19
-------	-------

STN INTERNATIONAL LOGOFF AT 18:26:11 ON 07 JUN 2005